

IN THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 6. This sheet, which includes Fig. 6, replaces the original sheet including Fig. 6.

Attachment: Replacement Sheet

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 11, 14, and 15 are currently pending. Claims 10, 12, and 13 have been canceled without prejudice; and Claims 11, 14, and 15 have been amended by the present amendment. The changes to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, the drawings were objected to as containing various informalities; the specification was objected to as containing various informalities; Claims 10-15 were objected to as containing various informalities; Claims 10 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,746,958 to Gustafsson (hereinafter “the ‘958 patent”) in view of U.S. Patent No. 3,538,595 to Barnes (hereinafter “the ‘595 patent”); Claims 11 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘958 patent in view of the ‘595 patent and U.S. Patent No. 6,228,301 to Taguchi et al. (hereinafter “the ‘301 patent”); Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘958 patent in view of the ‘595 patent and U.S. Patent No. 5,301,881 to Hayashi et al. (hereinafter “the ‘881 patent”); Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘958 patent in view of the ‘595, ‘881, and ‘301 patents; Claims 10 and 12 were provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claim 6 of co-pending Application No. 11/481,790 (hereinafter “the ‘790 application”) in view of the ‘958 patent; Claims 11 and 14 were provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claim 6 of the co-pending ‘790 application in view of the ‘958 and ‘301 patents; Claim 13 was provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claim 6 of the

co-pending '790 application in view of the '958 and '881 patents; and Claim 15 was provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claim 6 of the co-pending '790 application in view of the '958, '301, and '881 patents.

Applicant wishes to thank the Examiner for the interview granted Applicant's representatives on March 9, 2007, at which time the outstanding objections to the drawings and rejection of Claim 11 under 35 U.S.C. § 103(a) were discussed. The Examiner agreed that the proposed changes to the drawings appear to overcome the drawing objections and do not add new matter. The Examiner also indicated that the 35 U.S.C. § 103(a) rejections would be reconsidered, pending the Examiner's further consideration of the claims upon formal submission of a response to the outstanding Office Action.

In response to the objections to the drawings, Figure 6 has been amended to address the informalities noted in the Office Action. Accordingly, the objections to the drawings are believed to have been overcome.

In response to the objections to the specification, the specification has been amended to address the informalities noted in the Office Action. Accordingly, the objections to the specification are believed to have been overcome.

In response to the objections to Claims 10-15, Claims 11, 14, and 15 have been amended to address the informalities noted in the Office Action. Further, Applicant respectfully submits that the objections to Claims 10, 12, and 13 are rendered moot by the present cancellation of those claims. Accordingly, the objections to Claims 10-15 are believed to have been overcome.

Regarding the rejection of Claims 10 and 12 under 35 U.S.C. § 103(a), Applicant respectfully submits that the rejection of Claims 10 and 12 is rendered moot by the present cancellation of those claims.

Claim 11 is directed to a manufacturing apparatus to manufacture a cylindrical main body of a wood-like molded product through extrusion molding, the apparatus comprising: (1) a first crushing device to crush a resin waste material; (2) a second crushing device to crush a wood waste material; (3) a third crushing device to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips; (4) a grinding device to grind the fine chips into a fine powder; (5) a blending mixer to mix the fine powder of the wood waste material and the crushed resin waste material to produce a mixed material; (6) an extrusion molding device to heat and melt the mixed material, and mold the mixed material into a cylindrical shape through extrusion molding; (7) a sizer member which includes an opening portion having an inner diameter which is substantially the same as an outer diameter of an extrusion mold product in the cylindrical shape produced by the extrusion molding device through the extrusion molding, and adjusts a sectional shape and a dimension of the extrusion mold product by inserting the extrusion mold product into the opening portion; and (8) a cutting device to cut the extrusion mold product, of which the sectional shape and the dimension are adjusted by the sizer member, into a predetermined length, thus forming the cylindrical main body.

Regarding the rejection of Claim 11 under 35 U.S.C. § 103(a), the '958 patent is directed to a method of producing a wood-thermoplastic composite material. The '595 patent is directed to a process for producing container components from tubular elements.

However, Applicant respectfully submits that the '958 and '595 patents, taken together or in proper combination, fail to disclose a third crushing device to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips; a grinding device to grind the fine chips into a fine powder; and a blending mixer to mix the fine powder of the wood waste material and the crushed resin waste material to produce a mixed material. Moreover, the Office Action acknowledges that the '958 and '595 patents fail to disclose a

third crushing device to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips, and a grinding device to grind the fine chips into a fine powder.¹ Rather, the Office Action relies on the '301 patent for such a teaching.

The '301 patent is directed to a cement-bonded wood chip product, resin bonded wood chip product, simulated wood product, and manufacturing method thereof. However, Applicant respectfully submits that the '301 patent does not disclose a third crushing device to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips; a grinding device to grind the fine chips into a fine powder; and a blending mixer to mix the fine powder of the wood waste material and the crushed resin waste material to produce a mixed material. Rather, the '301 patent discloses a manufacturing method of a simulated wood product, in which, by means of pulverizing recycled wooden members and recycled resinous members after they have been mixed, a mixing process and the pulverizing process can be incorporated into one line, reducing space as well as work in a plant, and improving production efficiency.² The '301 patent does not disclose a blending mixer to mix the fine powder of the wood waste material and the crushed resin waste material to produce a mixed material, wherein a grinding device grinds the fine chips into a fine powder prior to mixing by a blending mixer.

Thus, no matter how the teachings of the '958, '595, and '301 patents are combined, the combination does not teach or suggest a third crushing device to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips; a grinding device to grind the fine chips into a fine powder; and a blending mixer to mix the fine powder of the wood waste material and the crushed resin waste material to produce a mixed material, as recited in Claim 11.

¹ See Office Action dated December 13, 2006, page 7, paragraph 1.

² See column 2, lines 56-63.

Furthermore, in the outstanding Office Action, the stated motivation for combining the teachings of the '958, '595, and '301 patents is "to enable the wood waste material to be pulverized in a three-step process which effectively pulverizes the wood waste material from lumps to fine powdery particles, as disclosed by the '301 patent."³ However, Applicants respectfully submit that the '301 patent specifically discloses that a mixing process is performed before a third crushing device and a grinding device are used.⁴ The '301 patent does not disclose that mixing occurs after a third crushing device and grinding device process the wood waste material crushed by the second crushing device. Thus, the outstanding Office Action has relied only on Applicant's disclosure for motivation to combine the references and has pointed to nothing in the references themselves or anywhere in the references indicating a motivation to combine the '958, '595, and '301 patent in a manner such that the invention of independent Claim 11 would be the result.

Accordingly, for the reasons stated above, Applicant respectfully submits that a *prima facie* case of obviousness has not been established and the rejection of Claim 11 should be withdrawn.

Regarding the rejection of Claim 13 under 35 U.S.C. § 103(a), Applicant respectfully submits that the rejection of Claim 13 is rendered moot by the present cancellation of that claim.

Independent Claim 14 recites limitations analogous to the limitations recited in Claim 11. Accordingly, for the reasons stated above for the patentability of Claim 11, Applicant respectfully submits that a *prima facie* case of obviousness has not been established and that the rejection of Claim 14 should be withdrawn.

³ Office Action dated December 13, 2006, page 7, paragraph 3.

⁴ See column 2, lines 56-63.

Independent Claim 15 recites limitations analogous to the limitations recited in Claim 11. However, the Office Action cites the '881 patent, in addition to the '958, '595, and '301 patents, in the rejection of Claim 15. The '881 patent does not remedy the deficiencies of the '958, '595, and '301, as discussed above. The '881 patent is directed to a system for disposing waste. However, Applicant respectfully submits that the '881 patent does not disclose a third crushing device to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips; a grinding device to grind the fine chips into a fine powder; and a blending mixer to mix the fine powder of the wood waste material and the crushed waste material and to produce a mixed material. Accordingly, for the reasons stated above for the patentability of Claim 11, Applicant respectfully submits that a *prima facie* case of obviousness has not been established and that the rejection of Claim 15 should be withdrawn.

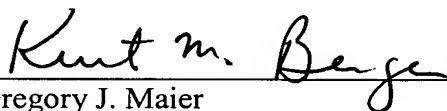
Regarding the obviousness-type double patenting rejection of Claims 10-15, Applicant respectfully submits that the rejection of Claims 10, 12, and 13 are rendered moot by the present cancellation of those claims. Furthermore, the '790 application will be amended to cancel Claim 6 without prejudice, as suggested by the Examiner. Accordingly, the obviousness-type double patenting rejections of Claims 11, 14, and 15 are believed to have been overcome.

Thus, it is respectfully submitted that independent Claims 11, 14, and 15 patentably define over the cited patents.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
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A handwritten signature in cursive script, reading "Kurt M. Berger", is written over a horizontal line.

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